

REMARKS

Favorable reconsideration of this application is respectfully requested in view of the previous amendments and the following remarks.

Claim 16 is rejected as being unpatentable over de Paula in view of newly cited U.S. Patent No. 5,032,026, hereinafter Jouve.

The Official Action correctly notes that de Paula does not disclose a door positioned in an aperture and at least on one side mounted so that an inner periphery of the aperture surrounds the door. The Official Action goes on to take the position that Jouve cures the above noted deficiencies in de Paula. Applicants disagree.

In particular, Jouve discloses an interferometric sensor including a cylindrical ring 11 forming a blind hole 114 closed by a flat face 115. The Official Action takes the position that Jouve's blind hole 114 constitutes an aperture, the flat face 115 constitutes a door, and that it would have been obvious to replace de Paula's pellicle arrangement with Jouve's blind hole closed by a flat face arrangement.

However, Jouve's sensor is designed for measuring absolute values of pressure and temperature within a well-- a vacuum is generated inside the sensor, which sensor is then put inside a well for measuring the pressure and temperature. De Paula's sensor, on the other hand, is for high-sensitivity spectroscopy. The Official Action provides no evidence that replacing de Paula's pellicle arrangement with Jouve's blind hole closed by a flat face arrangement would provide the necessary sensitivity for high-sensitivity spectroscopy. Accordingly, the Official Action has failed to provide sufficient evidence in support of the asserted modification.

Moreover, the amended version of Claim 16 presented here more clearly distinguishes the claimed detector over the disclosures in de Paula and Jouve. Specifically, amended Claim 16 recites that a slit exists between the door and the inner periphery of the aperture. In Jouve, there is no slit between the flat face 115 and the blind bore 114. Indeed the flat face 115 completely closes the blind bore 114.

For the above reasons, amended Claim 16 is allowable over the disclosures in de Paula and Jouve. Withdrawal of the rejection of Claim 16 is therefore respectfully requested.

Claim 27 (the other independent claim) is rejected as being unpatentable over Meringdal.

The Official Action correctly notes that Meringdal does not disclose a door on only one side mounted on structure of a door frame encircling side faces of the door. The Official Action goes on to state that modifying Meringdal's sensor to have this feature would have been obvious to an ordinarily skilled artisan. Applicants respectfully disagree.

The Official Action fails to provide any evidence that mounting a sensor diaphragm on only one side to structure encircling side faces of the door was a technique known to an ordinarily skilled artisan. Moreover, Jouve's diaphragm sensor would no longer work as intended if modified as asserted by the Examiner. Applicants respectfully submit that the Examiner has relied on impermissible hindsight reasoning in alleging obviousness of the asserted modification. "A factfinder should be aware, of course, of the distortion caused by hindsight bias and

must be cautious of arguments reliant upon *ex post* reasoning." *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1742 (2007).

For at least the above reasons, Claim 27 is allowable over the disclosure in Meringdal. Withdrawal of the rejection of Claim 27 is therefore also respectfully requested.

The dependent claims are allowable at least by virtue of their dependence from allowable independent claims. Thus, a detailed discussion of the additional distinguishing features recited in the dependent claims is not set forth at this time.

Early and favorable action with respect to this application is respectfully requested.

Should any questions arise in connection with this application or should the Examiner believe that a telephone conference with the undersigned would be helpful in resolving any remaining issues pertaining to this application the undersigned respectfully requests that he be contacted at the number indicated below.

Respectfully submitted,

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